

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**1.(Previously Presented)** A method for encoding a tag with an  $n$ -bit binary code ( $n > 1$ ), the method comprising:

(a) associating with the tag one or more predetermined frequency sources that produce known different respective characteristic frequencies; and

(b) associating with each of said characteristic frequencies a known unique position in the  $n$ -bit binary code.

**2.(Original)** The method of Claim 1, wherein at least some of the frequency sources are passive frequency sources.

**3.(Original)** The method of Claim 2, wherein the passive frequency sources are resonant elements.

**4.(Original)** The method of Claim 1, wherein at least some of the frequency sources are active frequency sources.

**5.(Original)** The method of Claim 1, wherein the characteristic frequencies are resonant frequencies.

6. (Original) The method of Claim 1, wherein the characteristic frequencies constitute acoustic signals.

7. (Canceled)

8. (Previously Presented) A method for alerting suspected theft from a premises of a tag having associated therewith one or more predetermined frequency sources that produce known different respective characteristic frequencies and each of which is associated with a known unique position in an  $n$ -bit binary code ( $n > 1$ ) that is characteristic of the tag, the method comprising:

(a) detecting  $n$ -bit binary codes emitted by tags leaving the premises;

(b) determining whether one or more of the  $n$ -bit binary codes corresponds to a tag that is removed from said premises without authorization; and

(c) if so, providing an alert.

9. (Previously Presented) A method for stock management of tags having associated therewith one or more predetermined frequency sources that produce known different respective characteristic frequencies and each of which is associated with a known unique position in an  $n$ -bit binary code ( $n > 1$ ) that is characteristic of the respective tag, said method comprising:

(a) recording the respective  $n$ -bit binary code of each tag in a stock list; and

(b) when removing an item from stock, detecting the respective  $n$ -bit binary code of said tag and updating the stock list accordingly.

10. (Previously Presented) A method for improving safety in an operating theater by keeping track of surgical instruments having associated therewith one or more predetermined frequency sources that produce known different respective characteristic frequencies and each of which is associated with a known unique position in an  $n$ -bit binary code ( $n > 1$ ) that is characteristic of the respective surgical instrument, said method comprising:

(a) on moving a surgical instrument to within a working area of the operating theater detecting the respective  $n$ -bit binary code of the surgical instrument;

(b) maintaining a running list of all surgical instruments that are in said working area; and

(c) upon termination of a surgical procedure ensuring that all surgical instruments are accounted for.

**11. (Previously Presented)** A method for authorizing an electrical appliance having at least one authorization code for use by an operative bearing an authorization tag having associated therewith one or more predetermined frequency sources that produce known different respective characteristic frequencies and each of which is associated with a known unique position in an  $n$ -bit binary code ( $n > 1$ ) that is characteristic of the respective electrical appliance, said method comprising:

(a) detecting  $n$ -bit binary codes emitted by the authorization tag;

(b) determining whether at least one of the  $n$ -bit binary codes matches an  $n$ -bit binary code that is characteristic of the electrical appliance; and

(c) if so, allowing operation of said electrical appliance.

**12. (Currently Amended)** A method for decoding an  $n$ -bit binary code encoded by a tag having associated therewith one or more predetermined frequency sources each adapted to emit a respective characteristic frequency associated with a known unique position in the  $n$ -bit binary code, the method comprising:

(a) detecting characteristic frequencies emitted by the tag; and

(b) substituting at respective positions of said  $n$ -bit binary ~~string~~ code respective binary values

according to a presence or absence of the respective characteristic frequency associated with the respective position in the  $n$ -bit binary code.

**13.(Original)** The method of Claim 12, wherein at least some of the characteristic frequencies are resonant frequencies.

**14.(Original)** The method of Claim 12, wherein at least some of the characteristic frequencies constitute acoustic signals.

**15.(Original)** The method of Claim 12, including detecting at least some of the characteristic frequencies in parallel.

**16.(Original)** The method of Claim 12, including detecting at least some of the characteristic frequencies sequentially.

**17.(Previously Presented)** A tag encoded with one or more predetermined frequency sources that produce known different respective characteristic frequencies and that are associated with a known unique position in an  $n$ -bit binary code ( $n > 1$ ).

**18.(Previously Presented)** An encoder for encoding a tag with an  $n$ -bit binary code ( $n > 1$ ), said encoder comprising:

a frequency source unit that is responsive to the  $n$ -bit binary code for depositing in association with the tag one or more predetermined frequency sources that produce known different respective characteristic frequencies and that are associated with a known unique position in the  $n$ -bit binary code.

**19. (Previously Presented)** A decoder for decoding a tag having an  $n$ -bit binary code, said decoder comprising:

a decoding unit responsive to one or more different characteristic frequencies each of which is associated with a known unique position in the  $n$ -bit binary code and for substituting at respective positions of said  $n$ -bit binary code respective binary values according to a presence or absence of the respective characteristic frequency associated with the respective position in the  $n$ -bit binary code.

**20. (Previously Presented)** A method for encoding a tag with an  $n$ -bit binary code, the method comprising:

(a) printing on or in association with the tag one or more predetermined frequency sources that produce known different respective characteristic frequencies; and

(b) associating with each of said characteristic frequencies a known unique position in the  $n$ -bit binary code.

21. (Previously Presented) The method of Claim 20, wherein at least some of the frequency sources are passive frequency sources.

22. (Previously Presented) The method of Claim 21, wherein the passive frequency sources are resonant elements.

23. (Previously Presented) The method of Claim 20, wherein at least some of the frequency sources are active frequency sources.

24. (Previously Presented) The method of Claim 20, wherein at least some of the characteristic frequencies are resonant frequencies.

25. (Previously Presented) The method of Claim 20, wherein at least some of the characteristic frequencies constitute acoustic signals.

26. (Previously Presented) A tag encoded with one or more predetermined frequency sources that are printed on or in association with the tag and that produce known different respective characteristic frequencies that are associated with a known unique position in an  $n$ -bit binary code.

27. (New) A method for processing a tag associated with an  $n$ -bit binary code ( $n > 1$ ), the method comprising:

encoding the tag with the  $n$ -bit binary code, including:

(a) associating with the tag one or more predetermined frequency sources that produce known different respective characteristic frequencies;

(b) associating with each of said characteristic frequencies a known unique position in the  $n$ -bit binary code; and

decoding the tag, including:

(c) detecting the characteristic frequencies emitted by the tag;

(d) substituting at respective positions of said  $n$ -bit binary code respective binary values according to a presence or absence of the respective characteristic frequency associated with the respective position in the  $n$ -bit binary code.

28. (New) A system for processing a tag associated with an  $n$ -bit binary code ( $n > 1$ ), the system comprises:

an encoder for encoding the tag with the  $n$ -bit binary code, the encoder includes:

a frequency source unit that is responsive to the  $n$ -bit binary code for depositing in association with the tag one or more decoding unit responsive to one or more



different characteristic frequencies each of which is associated with a known unique position in the  $n$  -bit binary code and for substituting at respective positions of said  $n$  -bit predetermined frequency sources that produce known different respective characteristic frequencies and that are associated with a known unique position in the  $n$  -bit binary code; and a decoder for decoding the tag, the decoder includes: a binary code respective binary values according to a presence or absence of the respective characteristic frequency associated with the respective position in the  $n$ -bit binary code.